

**WHAT IS CLAIMED IS:**

1. A method for identifying the health of virtual routers in a network comprising:
  - obtaining first information from a first and second router of a virtual router;
  - using the first information to determine the health of the virtual router; and
  - producing a topology of the network identifying the health of the virtual router.
2. The method of claim 1, comprising:
  - monitoring messages in the network;
  - using second information from the messages to determine whether there are changes to the health of the virtual router; and
  - updating, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.
3. The method of claim 1, comprising:
  - obtaining the first information from a router of a plurality of virtual routers, wherein the topology identifies the health of the plurality of virtual routers.
4. The method of claim 1, wherein the first information is group priority information and group standby state information for each of the first and second routers.
5. The method of claim 1, wherein the first and second routers operate according to a virtual swappable router protocol.
6. A method for identifying the health of virtual routers in a network comprising:

obtaining first information from a first and second router in the network;  
determining, based on the first information, whether the first and second routers comprise a virtual router;

using the first information to determine the health of the virtual router if the first and second routers comprise a virtual router; and

producing a topology of the network identifying the health of the virtual router.

7. The method of claim 6, comprising:

monitoring messages in the network;

using second information from the messages to determine whether there are changes to the health of the virtual router; and

updating, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

8. The method of claim 6, wherein the first information is group priority information and group standby state information for each of the first and second routers.

9. The method of claim 6, wherein the first and second routers operate according to a virtual swappable router protocol.

10. A management computer for identifying the health of virtual routers in a network comprising:

a processor configured to obtain first information from a first and second router of a virtual router, and to use the first information to determine the health of the virtual router; and

a memory which stores the first information to produce a topology of the network identifying the health of the virtual router.

11. The management computer of claim 10, wherein the processor is configured to monitor messages in the network, use second information from the messages to determine whether there are changes to the health of the virtual router, and update, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

12. The management computer of claim 10, wherein the processor is configured to obtain the first information from a router of a plurality of virtual routers, wherein the topology identifies the health of the plurality of virtual routers.

13. The management computer of claim 10, wherein the first information is group priority information and group standby state information for each of the first and second routers.

14. The management computer of claim 10, wherein the first and second routers operate according to a virtual swappable router protocol.

15. A management computer for identifying the health of virtual routers in a network comprising:

a processor configured to obtain first information from a first and second router in the network, to determine, based on the first information, whether the first and second routers comprise a virtual router, to use the first information to determine the health of the virtual router if the first and second routers comprise a virtual router; and

a memory which stores the first information to produce a topology of the network identifying the health of the virtual router.

16. The management computer of claim 15, wherein the processor is configured to monitor messages in the network, to use second information from the messages to determine whether there are changes to the health of the virtual router, and to update, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

17. The management computer of claim 15, wherein the first information is group priority information and group standby state information for each of the first and second routers.

18. The management computer of claim 15, wherein the first and second routers operate according to a virtual swappable router protocol.

19. A computer readable medium containing a computer program for performing a method for identifying the health of virtual routers in a network, the method comprising:

obtaining first information from a first and second router of a virtual router;  
using the first information to determine the health of the virtual router; and  
producing a topology of the network identifying the health of the virtual router.

20. The method of claim 19, comprising:

monitoring messages in the network;  
using second information from the messages to determine whether there are changes to the health of the virtual router; and  
updating, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

21. The method of claim 19, comprising:

obtaining the first information from a routers of a plurality of virtual routers, wherein the topology identifies the health of the plurality of virtual routers.

22. The method of claim 19, wherein the first information is group priority information and group standby state information for each of the first and second routers.

23. The method of claim 19, wherein the first and second routers operate according to a virtual swappable router protocol.

24. A computer readable medium containing a computer program for performing a method for identifying the health of virtual routers in a network, the method comprising:

- obtaining first information from a first and second router in the network;
- determining, based on the first information, whether the first and second routers comprise a virtual router;
- using the first information to determine the health of the virtual router if the first and second routers comprise a virtual router; and
- producing a topology of the network identifying the health of the virtual router.

25. The method of claim 24, comprising:

- monitoring messages in the network;
- using second information from the messages to determine whether there are changes to the health of the virtual router; and
- updating, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

26. The method of claim 24, wherein the first information is group priority information and group standby state information for each of the first and second routers.

27. The method of claim 24, wherein the first and second routers operate according to a virtual swappable router protocol.

28. A management computer for identifying the health of virtual routers in a network comprising:

means for processing to obtain first information from a first and second router of a virtual router, and to use the first information to determine the health of the virtual router; and

means for storing the first information to produce a topology of the network identifying the health of the virtual router.

29. The management computer of claim 28, wherein the means for processing monitors messages in the network, uses second information from the messages to determine whether there are changes to the health of the virtual router, and updates, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

30. The management computer of claim 28, wherein the means for processing obtains the first information from a router of a plurality of virtual routers, wherein the topology identifies the health of the plurality of virtual routers.

31. The management computer of claim 28, wherein the first information is group priority information and group standby state information for each of the first and second routers.

32. The management computer of claim 28, wherein the first and second routers operate according to a virtual swappable router protocol.

33. A management computer for identifying the health of virtual routers in a network comprising:

means for processing to obtain first information from a first and second router in the network, to determine, based on the first information, whether the first and second routers comprise a virtual router, to use the first information to determine the health of the virtual router if the first and second routers comprise a virtual router; and

means for storing the first information to produce a topology of the network identifying the health of the virtual router.

34. The management computer of claim 33, wherein the means for processing monitors messages in the network, uses second information from the messages to determine whether there are changes to the health of the virtual router, and to updates, if there are changes in the health of the virtual router, the topology to reflect the changes in the health of the virtual router.

35. The management computer of claim 33, wherein the first information is group priority information and group standby state information for each of the first and second routers.

36. The management computer of claim 33, wherein the first and second routers operate according to a virtual swappable router protocol.